



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,623	07/28/2003	Reuven Unger	P23593	4331
7055	7590	03/01/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			GARCIA, ERNESTO	
1950 ROLAND CLARKE PLACE			ART UNIT	
RESTON, VA 20191			PAPER NUMBER	

3679

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,623

Applicant(s)

UNGER ET AL.

Examiner

Ernesto Garcia

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-14 and 25 is/are pending in the application.
- 4a) Of the above claim(s) 4, 8, 13 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9, 10, 12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 12/23/05 has been entered.

Election of Species

Claims 4, 8, 13, and 25, are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 3, 2004.

Regarding the withdrawal of claim 25, this method is not readable on the elected species. Note that no rod is supported via the spring to render the step of supporting, via the spring, a rod.

Drawings

The drawings were received on 12/23/2005. These drawings are acceptable.

Claim Objections

Claims 3 and 7 objected to because of the following informalities:

regarding claims 3 and 7, "threadedly" in line 4 should be --threadably--.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10, 12, and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 10, the subject matter “only two inner diameters” recited in line 6 is nowhere found in the original disclosure. Applicants have not indicated that the spring support “only” has two inner diameters or have the applicants indicated any criticality of having only two inner diameters for practicing the invention. Further, according to the Figure 3, the inner diameter of the thread is considered an inner diameter and therefore the spring support does not only contain two inner diameters.

Regarding claims 12 and 14, the claims depend from claim 10 and therefore contain new subject matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5-7, 9, 10, 12, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 5, and 10, the recitation "configured to support a rod such that the rod elastically moves back and forth" in lines 2-3 makes unclear what configuration of the spring is required to allow the spring to support the rod such that the rod elastically moves back and forth. The recitation "configured to support the spring" in line 5 makes unclear what configuration of the spring mount is required to allow the spring mount to support the spring. The recitation "configured to connect to the spring support" in claims 1 and 5, line 6, and in claim 10, line 10" makes unclear what configuration of the coupling ring is required to allow the coupling ring to connect to the spring support.

Regarding claim 5, the recitation "and further configured to facilitate the connection of said spring support to said coupling ring" in lines 9-10 makes unclear what configuration of the fixation holes is required to facilitate the connection of the spring support to the coupling ring in addition to being "configured to accept a respective plurality of fixation tools" recited in line 9. The recitation "configured to accept a respective plurality of fixation tools" in line 9 makes unclear what configuration of the fixation holes is required to allow the fixation holes to accept a respective plurality of fixation tools.

Regarding claims 3 and 7, the limitation "configured to threadedly engage each other" in line 4 makes unclear what configuration of the first thread and the second

thread is required to allow the first thread and the second thread to threadedly engage each other.

Regarding claims 2 and 3, the claims depend from claim 1 and therefore are indefinite.

Regarding claims 6, 7, and 9, the claims depend from claim 5 and therefore are indefinite.

Regarding claims 12 and 14, the claims depend from claim 10 and therefore are indefinite.

Claim Rejections - 35 USC § 102

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Seguin, 2,020,522 (see marked-up attachment provided in the last Office action).

Regarding claim 1, Seguin discloses, in Figure 6, a securing device comprising a spring **9**, a generally annular spring support **3'** and a generally annular coupling ring **2**. The spring support **3'** includes a spring mount **12** projecting in an inner side **A3** of the spring support **3'**. Applicants should note that the spring **9** is able to support a rod such that the rod elastically moves back and forth.

Regarding claim 2, the spring support **3'** has a first inner diameter **A5** and second inner diameter **A6**. The spring mount **12** radially inwardly projects at a region **A7** between the first inner diameter **A5** and the second inner diameter **A6**.

Regarding claim 3, a first thread is formed on an inner periphery of the spring mount **12**. A second thread is formed on an outer periphery of the coupling ring **2**.

Claims 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodruff et al., 6,309,524 (see marked-up attachment provided in the last Office action).

Regarding claim 10, Woodruff et al. disclose, in Figure 25, a securing device comprising a spring **610d**, a generally annular spring support **625d**, a generally annular coupling ring **605d**, and threaded holes **A11** in the coupling ring **605d**. The spring support **625d** includes a spring mount **725d** projecting in an inner side **765d** of the spring support **625d** and configured to support the spring **610d**. The spring support **625d** has only two inner diameters. The two inner diameters consist of a first inner diameter and a second inner diameter **730d** smaller than the first inner diameter. The spring mount **725d** is positioned at a region of the spring support located between the first inner diameter and the second inner diameter **730d**.

Regarding claim 14, the threaded holes **A11** are at an interval of approximately 90 degrees or 180 degrees on the coupling ring **605d**.

Claims 10-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Brunais et al., 4,333,434 (see marked-up attachment provided in the last Office action).

Regarding claim 10, Brunais et al. disclose, in Figure 2, a securing device comprising a spring **126**, a generally annular spring support **62**, a generally annular coupling ring **60**, and threaded holes **106** in the coupling ring **60**. The spring support **62** includes a spring mount **A2** projecting in an inner side **A3** of the spring support **62** and configured to support the spring **126**. The spring support **62** has only two inner diameters. The two inner diameters consist of a first inner diameter and a second inner diameter smaller than the first inner diameter. The spring mount **A2** is positioned at a region of the spring support **62** located between the first inner diameter and the second inner diameter.

Regarding claim 11, the spring support **62** has a first inner diameter **A5** and second inner diameter **A6**. The spring mount **A2** radially inwardly projects at a region between the first inner diameter **A5** and the second inner diameter **A6**.

Regarding claim 12, a first thread **100** is formed on an inner periphery of the spring mount **A2**. A second thread **98** is formed on an outer periphery of the coupling ring **60**.

Regarding claim 14, the threaded holes **106** are at an interval of approximately 90 degrees or 180 degrees on the coupling ring **60**.

Claim Rejections - 35 USC § 103

Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seguin, 2,020,522, in view of Sergeant, 2,110,427.

Regarding claim 5, Seguin discloses, in Figure 6, a securing device comprising a spring **9**, a generally annular spring support **3'**, a generally annular coupling ring **2**. The spring support **3'** includes a spring mount **12** projecting in an inner side **A3** of the spring support **3'**. However, Seguin fails to disclose fixation holes penetratingly formed through the coupling ring **2**. Sergeant teaches, in Figures 1 and 3, fixation holes **2c** penetratingly formed through a coupling ring **2** to allow removal and fixation of the coupling ring to an annular spring support. Therefore, as taught by Seguin, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the fixation elements 5 of Seguin with the fixation holes penetratingly formed through the coupling ring to allow removal and fixation of the coupling ring to the annular spring support. Applicants should note that the spring **9** is able to support a rod

Art Unit: 3679

such that the rod elastically moves back and forth. Further, given the modification, the fixation holes can facilitate the connection of the spring support to the coupling ring or vice versa.

Regarding claim 6, the spring support **3'** has a first inner diameter **A5** and second inner diameter **A6**. The spring mount **12** radially inwardly projects at a region **A7** between the first inner diameter **A5** and the second inner diameter **A6**.

Regarding claim 7, a first thread is formed on an inner periphery of the spring mount **12**. A second thread is formed on an outer periphery of the coupling ring **2**.

Regarding claim 9, Seguin, as modified above, teaches the fixation holes **2c** are at an interval of approximately 90 degrees or 180 degrees on the coupling ring **2**.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-7, 9, 10, 12, and 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



E.G.
February 23, 2006



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600